

Title (en)
DISTORTION ARTIFACT REMOVAL AND UPSCALING IN MAGNETIC RESONANCE IMAGING

Title (de)
VERZERRUNGSARTEFAKTENTFERNUNG UND HOCHSKALIERUNG IN DER MAGNETRESONANZBILDGEBUNG

Title (fr)
ÉLIMINATION D'ARTÉFACTS DE DISTORSION ET MISE À L'ÉCHELLE DE L'IMAGE EN IMAGERIE PAR RÉSONANCE MAGNÉTIQUE

Publication
EP 4224194 A1 20230809 (EN)

Application
EP 22155634 A 20220208

Priority
EP 22155634 A 20220208

Abstract (en)
Disclosed herein is a medical system (100, 300) comprising a memory (110) storing machine executable instructions (116) and a super resolution neural network (118). The super resolution neural network is configured to receive an initial magnetic resonance image (114, 114') descriptive of a subject (318), having a first resolution, and containing an image distortion artifact. The super resolution neural network is configured to output an enhanced magnetic resonance image in response to receiving the initial magnetic resonance image. The enhanced magnetic resonance image has a second resolution, that is higher than the first resolution, and has a reduction or removal of the image distortion artifact. Execution of the machine executable instructions causes a computational system (104) to: receive (200) the initial magnetic resonance image and receive (204) the enhanced magnetic resonance image in response to inputting the initial magnetic resonance image in to the super resolution neural network.

IPC 8 full level
G01R 33/56 (2006.01); **G01R 33/565** (2006.01); **G06T 3/40** (2006.01); **G06N 3/02** (2006.01)

CPC (source: EP)
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Citation (applicant)
US 2020126190 A1 20200423 - LEBEL ROBERT MARC [CA]

Citation (search report)

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CN117649344A

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

Designated validation state (EPC)
KH MA MD TN

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